### WHAT IS CLAIMED IS:

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### 1. A compound of Formula I:

R<sup>2</sup>

5 wherein X is aryl substituted by R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1d</sup>, and R<sup>1e</sup>;

wherein A is selected from the group consisting of cycloalkyl, cycloalkenyl, aryl, heterocycloalkyl, heterocycloalkenyl, and heteroaryl, wherein A is optionally substituted by one or more substituents independently selected from the group consisting of R³;

wherein R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1d</sup>, R<sup>1e</sup>, and R<sup>3</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, alkyl, haloalkyl, hydroxyalkyl, alkylsulfinyl, alkylsulfonyl, alkoxycarbonyl, haloalkoxy, aryl, alkenyl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, acylamino, -OR<sup>1o</sup>, -SR<sup>7e</sup>, -SO<sub>2</sub>N(R<sup>7e</sup>)R<sup>7b</sup>, -NR<sup>8e</sup>R<sup>8b</sup>, NR<sup>8e</sup>COR<sup>8c</sup>, -NR<sup>8e</sup>CO(OR<sup>8c</sup>), -NR<sup>8e</sup>SO<sub>2</sub>R<sup>8e</sup>,

-NR<sup>8a</sup>SO<sub>2</sub>N(R<sup>9a</sup>)R<sup>9b</sup>, -NR<sup>8a</sup>CON(R<sup>9a</sup>)R<sup>8b</sup>, -COR<sup>8a</sup>, -CO<sub>2</sub>R<sup>7a</sup>, and -CON(R<sup>7a</sup>)R<sup>7b</sup>, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, or alkenyl may be substituted with one or more substituents selected from the group consisting of R<sup>8a</sup>;

wherein R2 is -NR118R11b;

wherein R⁴ is selected from the group consisting of cyano, -CO₂R⁵⁰, and -CH₂OR⁵⁰, CONR⁵⁰R⁵⁰;

wherein R<sup>5a</sup>, R<sup>5b</sup>, and R<sup>6</sup> are independently selected from the group consisting of hydrido, hydroxyl, alkoxy, alkyl, haloalkyl, aryl, and heteroaryl;

wherein R<sup>7a</sup> and R<sup>7b</sup> are independently selected from the group consisting of hydrido, aryl, heteroaryl, aralkyl, heterocycloalkyl, heterocycloalkenyl, haloalkyl, aralkylamino, alkylaminoalkyl, N,N-dialkylaminoacyl, alkyl, alkenyl, alkynyl, and heteroaralkyl;

wherein R<sup>8e</sup> and R<sup>8b</sup> are independently selected from the group consisting of hydrido, alkyl, aryl, heteroaryl, aralkyl, heterocycloalkyl, heterocycloalkenyl, cycloalkyl, haloalkyl, aralkylamino, amino, aminoalkyl, aminoacyl, and heteroaralkyl, wherein said alkyl, aryl, heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, alkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, N-alkylamino, alkylsulfonamido, aminoalkyl, alkylaminoalkyl, alkoxy, halo, acyloxy, haloalkyl, haloalkoxy, acyl, hydroxyalkoxy, dialkylaminoacyl, thioalkyl, aminoacyloxy, alkyldioxy, hydroxyalkyl, N-alkylamino, alkoxycarbonyl, alkoxyalkyl, alkenylamino, alkynylamino, alkenyl, alkynyl, N,N-dialkylaminoalkoxy, heterocycloalkyl, heterocycloalkenyl, or heteroaryl substituents may be substituted with a substituent selected from the group consisting of alkyl, N-alkylamino, aminoalkyl, hydroxyalkyl, and alkylaminoalkyl;

wherein R<sup>sc</sup> is selected from the group consisting of hydrido, nitro, azido, alkyl, aryl, heteroaryl, aralkyl, heterocycloalkyl, heterocycloalkenyl, cycloalkyl, haloalkyl, aralkylamino, amino, aminoalkyl, aminoacyl, and heteroaralkyl, wherein said alkyl, aryl, heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, alkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, N-alkylamino, alkylsulfonamido, aminoalkyl, alkylaminoalkyl, alkoxy, halo, acyloxy, haloalkyl, haloalkoxy, acyl, hydroxyalkoxy, dialkylaminoacyl, thioalkyl, aminoacyloxy, alkyldioxy, hydroxyalkyl, N-alkylamino, alkoxycarbonyl, alkoxyalkyl, alkenylamino, alkynylamino, alkenyl, alkynyl, N,N-dialkylaminoalkoxy, heterocycloalkyl, heterocycloalkenyl, or heteroaryl substituents

may be substituted with a substituent selected from the group consisting of alkyl, N-alkylamino, aminoalkyl, hydroxyalkyl, and alkylaminoalkyl;

wherein R<sup>9a</sup> and R<sup>9b</sup> are independently selected from the group consisting of hydrido, alkyl, heteroaryl, heterocycloalkyl, heterocycloalkenyl, haloalkyl, aralkylamino, heteroaralkyl, aryl, and aralkyl, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, or aralkyl moieties may be substituted with one or more radicals selected from the group consisting of alkyl, alkoxy, halo, haloalkyl, cyano, haloalkoxy, acyl, carboxyl, hydroxy, hydroxyalkoxy, phenoxy, benzyloxy, N,N-dialkylaminoalkoxy, heteroaryl, heterocycloalkyl, and heterocycloalkenyl;

wherein R<sup>10</sup> is selected from the group consisting of hydrido, aryl, heteroaryl, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, alkoxyalkyl, heterocycloalkyl, heteroaryl, and heterocycloalkenyl;

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wherein R<sup>116</sup> and R<sup>116</sup> are independently selected from the group consisting of hydrido, aryl, heteroaryl, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, alkoxy, alkoxyalkyl, heterocycloalkyl, heteroaryl, and heterocycloalkenyl;

wherein R<sup>2</sup> and R<sup>4</sup> may form a 4- to 6-membered heterocyclic ring having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>6</sup>;

wherein R<sup>7e</sup> and R<sup>7b</sup> may be taken together to form a 3- to 7-membered heterocyclic moiety having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>8e</sup>; and

wherein R<sup>9a</sup> and R<sup>9b</sup> may be taken together to form a 3- to 7-membered heterocyclic moiety having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>8a</sup>;

or a pharmaceutically acceptable salt thereof.

#### 2. A compound of Formula II

wherein X is aryl substituted by R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1d</sup>, and R<sup>1e</sup>;
wherein A is selected from the group consisting of cycloalkyl,
cycloalkenyl, aryl, heterocycloalkyl, heterocycloalkenyl, and heteroaryl, wherein
A is optionally substituted by one or more substituents independently selected
from the group consisting of R<sup>3</sup>;

wherein R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1d</sup>, R<sup>1e</sup>, and R<sup>3</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, alkyl, haloalkyl, hydroxyalkyl, alkylsulfinyl, alkylsulfonyl, alkoxycarbonyl, haloalkoxy, aryl, alkenyl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, acylamino, -OR<sup>10</sup>, -SR<sup>7a</sup>, -SO<sub>2</sub>N(R<sup>7a</sup>)R<sup>7b</sup>, -NR<sup>8a</sup>R<sup>8b</sup>, NR<sup>8a</sup>COR<sup>8c</sup>, -NR<sup>8a</sup>CO(OR<sup>8c</sup>), -NR<sup>8a</sup>SO<sub>2</sub>R<sup>9a</sup>, -NR<sup>8a</sup>SO<sub>2</sub>N(R<sup>9a</sup>)R<sup>9b</sup>, -NR<sup>8a</sup>CON(R<sup>9a</sup>)R<sup>9b</sup>, -COR<sup>8a</sup>, -CO<sub>2</sub>R<sup>7a</sup>, and -CON(R<sup>7a</sup>)R<sup>7b</sup>, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, or alkenyl may be substituted with one or more substituents selected from the group consisting of R<sup>8a</sup>;

wherein R2 is -NR118R11b;

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wherein R⁴ is selected from the group consisting of cyano, -CO₂R⁵a, and -CH₂OR⁵a, CONR⁵a, CONR⁵a;

wherein R<sup>5a</sup>, R<sup>5b</sup>, and R<sup>6</sup> are independently selected from the group consisting of hydrido, hydroxyl, alkoxy, alkyl, haloalkyl, aryl, and heteroaryl; wherein R<sup>7a</sup> and R<sup>7b</sup> are independently selected from the group consisting

of hydrido, aryl, heteroaryl, aralkyl, heterocycloalkyl, heterocycloalkenyl,

haloalkyl, aralkylamino, alkylaminoalkyl, N,N-dialkylaminoacyl, alkyl, alkenyl, alkynyl, and heteroaralkyl;

wherein R<sup>8a</sup> and R<sup>8b</sup> are independently selected from the group consisting of hydrido, alkyl, aryl, heteroaryl, aralkyl, heterocycloalkyl, heterocycloalkenyl, cycloalkyl, haloalkyl, aralkylamino, amino, aminoalkyl, aminoacyl, and heteroaralkyl, wherein said alkyl, aryl, heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of 5 oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, alkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, Nalkylamino, alkylsulfonamido, aminoalkyl, alkylaminoalkyl, alkoxy, halo, acyloxy, haloalkyl, haloalkoxy, acyl, hydroxyalkoxy, dialkylaminoacyl, thioalkyl, aminoacyloxy, alkyldioxy, hydroxyalkyl, N-alkylamino, alkoxycarbonyl, 10 alkoxyalkyl, alkenylamino, alkynylamino, alkenyl, alkynyl, N,Ndialkylaminoalkoxy, heterocycloalkyl, heterocycloalkenyl, and heteroaryl, wherein said heterocycloalkyl, heterocycloalkenyl, or heteroaryl substituents may be substituted with a substituent selected from the group consisting of alkyl, N-alkylamino, aminoalkyl, hydroxyalkyl, and alkylaminoalkyl; 15

wherein R<sup>sc</sup> is selected from the group consisting of hydrido, nitro, azido, alkyl, aryl, heteroaryl, aralkyl, heterocycloalkyl, heterocycloalkenyl, cycloalkyl, haloalkyl, aralkylamino, amino, aminoalkyl, aminoacyl, and heteroaralkyl, wherein said alkyl, aryl, heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, alkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, N-alkylamino, alkylsulfonamido, aminoalkyl, alkylaminoalkyl, alkoxy, halo, acyloxy, haloalkyl, haloalkoxy, acyl, hydroxyalkoxy, dialkylaminoacyl, thioalkyl, aminoacyloxy, alkyldioxy, hydroxyalkyl, N-alkylamino, alkoxycarbonyl, alkoxyalkyl, alkenylamino, alkynylamino, alkenyl, alkynyl, N,N-dialkylaminoalkoxy, heterocycloalkyl, heterocycloalkenyl, or heteroaryl substituents

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may be substituted with a substituent selected from the group consisting of alkyl, N-alkylamino, aminoalkyl, hydroxyalkyl, and alkylaminoalkyl;

wherein R<sup>9a</sup> and R<sup>9b</sup> are independently selected from the group consisting of hydrido, alkyl, heteroaryl, heterocycloalkyl, heterocycloalkenyl, haloalkyl, aralkylamino, heteroaralkyl, aryl, and aralkyl, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, or aralkyl moieties may be substituted with one or more radicals selected from the group consisting of alkyl, alkoxy, halo, haloalkyl, cyano, haloalkoxy, acyl, carboxyl, hydroxy, hydroxyalkoxy, phenoxy, benzyloxy, N,N-dialkylaminoalkoxy, heteroaryl, heterocycloalkyl, and heterocycloalkenyl;

wherein R<sup>10</sup> is selected from the group consisting of hydrido, aryl, heteroaryl, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, alkoxyalkyl, heterocycloalkyl, heteroaryl, and heterocycloalkenyl;

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wherein R<sup>118</sup> and R<sup>116</sup> are independently selected from the group consisting of hydrido, aryl, heteroaryl, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, alkoxy, alkoxyalkyl, heterocycloalkyl, heteroaryl, and heterocycloalkenyl;

wherein R² and R⁴ may form a 4- to 6-membered heterocyclic ring having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO₂, O, N, and NR⁶;

wherein R<sup>7a</sup> and R<sup>7b</sup> may be taken together to form a 3- to 7-membered heterocyclic moiety having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>a</sub>, O, N, and NR<sup>8a</sup>; and

wherein R<sup>9a</sup> and R<sup>9b</sup> may be taken together to form a 3- to 7-membered heterocyclic moiety having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>8a</sup>;

or a pharmaceutically acceptable salt thereof.

3. A compound according to claim 2 wherein:

X is C<sub>5-12</sub> aryl substituted by R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1d</sup>, and R<sup>1e</sup>;

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wherein A is selected from the group consisting of  $C_{3-12}$  cycloalkyl,  $C_{3-12}$  cycloalkenyl,  $C_{5-12}$  aryl, 5- to 12-membered heterocycloalkyl, 5- to 12-membered heterocycloalkenyl, and 5- to 12-membered heteroaryl, wherein A is optionally substituted by one or more substituents independently selected from the group consisting of  $R^3$ ;

wherein R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1c</sup>, R<sup>1e</sup>, and R<sup>3</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> hydroxyalkyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylsulfonyl, C<sub>2-7</sub> alkoxycarbonyl, C<sub>1-6</sub> haloalkoxy, C<sub>5-12</sub> aryl, C<sub>2-6</sub> alkenyl, 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl, 5- to 12-membered heteroaryl, C<sub>2-10</sub> acylamino, -OR<sup>10</sup>, -SR<sup>7a</sup>, -SO<sub>2</sub>N(R<sup>7a</sup>)R<sup>7b</sup>, -NR<sup>8a</sup>R<sup>8b</sup>, NR<sup>8a</sup>COR<sup>8c</sup>, -NR<sup>8a</sup>CO(OR<sup>8c</sup>), -NR<sup>8a</sup>SO<sub>2</sub>R<sup>9a</sup>, -NR<sup>8a</sup>SO<sub>2</sub>N(R<sup>9a</sup>)R<sup>9b</sup>, -NR<sup>8a</sup>CON(R<sup>9a</sup>)R<sup>9b</sup>, -COR<sup>8a</sup>, -CO<sub>2</sub>R<sup>7a</sup>, and -CON(R<sup>7a</sup>)R<sup>7b</sup>, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, or alkenyl moiety may be substituted with one or more substituents selected from the group consisting of R<sup>8a</sup>;

wherein R⁴ is selected from the group consisting of cyano, -CO₂R⁵ , and -CH₂OR⁵ , CONR⁵ R⁵ ;

wherein R<sup>5a</sup>, R<sup>5b</sup>, and R<sup>6</sup> are independently selected from the group consisting of hydrido, hydroxyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>5-12</sub> aryl, and 5- to 12-membered heteroaryl;

wherein  $R^{7a}$  and  $R^{7b}$  are independently selected from the group consisting of hydrido,  $C_{5-12}$  aryl, 5- to 12-membered heteroaryl,  $C_{4-18}$  aralkyl, 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl,  $C_{1-8}$  haloalkyl,  $C_{4-18}$  aralkylamino,  $C_{2-12}$  alkylaminoalkyl, N-N-di( $C_{1-6}$  alkyl)amino( $C_{1-6}$  alkyl),  $C_{1-6}$  alkyl,  $C_{2-6}$  alkenyl,  $C_{2-6}$  alkynyl, and 4- to 18-membered heteroaralkyl;

wherein  $R^{8a}$  and  $R^{8b}$  are independently selected from the group consisting of hydrido,  $C_{1-8}$  alkyl,  $C_{5-12}$  aryl, 5- to 12-membered heteroaryl,  $C_{4-18}$  aralkyl, 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl,  $C_{3-12}$ 

cycloalkyl, C<sub>1-6</sub> haloalkyl, C<sub>4-18</sub> aralkylamino, amino, C<sub>1-6</sub> aminoalkyl, C<sub>2-10</sub> aminoacyl, and 4- to 18-membered heteroaralkyl, wherein said alkyl, aryl, heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, 5 C<sub>1.5</sub> alkyl, C<sub>1.5</sub> alkylthio, C<sub>1.5</sub> alkylsulfinyl, C<sub>1.5</sub> alkylsulfonyl, N-(C<sub>1.5</sub> alkyl)amino, C<sub>1.5</sub> alkylsulfonamido, C<sub>1-6</sub> aminoalkyl, C<sub>2-12</sub> alkylaminoalkyl, C<sub>1-8</sub> alkoxy, halo, C<sub>2-10</sub> acyloxy, C<sub>1.6</sub> haloalkyl, C<sub>1.6</sub> haloalkoxy, C<sub>2.10</sub> acyl, C<sub>1.6</sub> hydroxyalkoxy, N,N-di(C<sub>1.6</sub> alkyl)amino( $C_{2-10}$  acyl),  $C_{1-6}$  thioalkyl,  $C_{2-10}$  aminoacyloxy,  $C_{1-6}$  alkyldioxy,  $C_{1-6}$ hydroxyalkyl, N-( $C_{1-6}$  alkyl)amino,  $C_{2-7}$  alkoxycarbonyl,  $C_{2-17}$  alkoxyalkyl,  $C_{2-6}$ 10 alkenylamino, C<sub>2-6</sub> alkynylamino, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, N,N-di(C<sub>1-6</sub> alkyl)amino(C<sub>1.6</sub> alkoxy), 3- to 12-membered heterocycloalkyl, 3- to 12membered heterocycloalkenyl, and 5- to 12-membered heteroaryl, wherein said 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl, or 15 5- to 12-membered heteroaryl moiety may be substituted with a substituent selected from the group consisting of C<sub>1-6</sub> alkyl, N-(C<sub>1-6</sub> alkyl)amino, C<sub>1-6</sub> aminoalkyl, C<sub>1.5</sub> hydroxyalkyl, and C<sub>2.12</sub> alkylaminoalkyl;

wherein  $R^{8c}$  is selected from the group consisting of hydrido, nitro, azido,  $C_{1.6}$  alkyl,  $C_{5.12}$  aryl, 5- to 12-membered heteroaryl,  $C_{4.18}$  aralkyl, 3- to 12-membered heterocycloalkyl,  $C_{3.12}$  cycloalkyl,  $C_{1.6}$  haloalkyl,  $C_{4.18}$  aralkylamino, amino,  $C_{1.6}$  aminoalkyl,  $C_{2.10}$  aminoacyl, and 4- to 18-membered heteroaralkyl, wherein said alkyl, aryl, heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate,  $C_{1.6}$  alkyl,  $C_{1.6}$  alkylthio,  $C_{1.6}$  alkylsulfinyl,  $C_{1.6}$  alkylsulfonamido,  $C_{1.6}$  aminoalkyl,  $C_{2.12}$  alkylaminoalkyl,  $C_{1.6}$  alkoxy, halo,  $C_{2.10}$  acyloxy,  $C_{1.6}$  haloalkyl,  $C_{1.6}$  thioalkyl,  $C_{2.10}$  aminoacyloxy,  $C_{1.6}$  alkyldioxy,  $C_{1.6}$ 

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hydroxyalkyl, N-( $C_{1.6}$  alkyl)amino,  $C_{2.7}$  alkoxycarbonyl,  $C_{2.12}$  alkoxyalkyl,  $C_{2.6}$  alkenylamino,  $C_{2.6}$  alkynylamino,  $C_{2.6}$  alkenyl,  $C_{2.6}$  alkynyl, N,N-di( $C_{1.6}$  alkyl)amino( $C_{1.6}$  alkoxy), 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl, and 5- to 12-membered heterocycloalkenyl, wherein said 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl, or 5- to 12-membered heterocycloalkyl moiety may be substituted with a substituent selected from the group consisting of  $C_{1.6}$  alkyl, N-( $C_{1.6}$  alkyl)amino,  $C_{1.6}$  aminoalkyl,  $C_{1.6}$  hydroxyalkyl, and  $C_{2.17}$  alkylaminoalkyl;

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wherein R<sup>9a</sup> and R<sup>9b</sup> are independently selected from the group consisting of hydrido, C<sub>1-6</sub> alkyl, 5- to 12-membered heteroaryl, 3- to 12-membered heterocycloalkenyl, C<sub>1-6</sub> haloalkyl, C<sub>4-18</sub> aralkylamino, 4- to 18-membered heteroaralkyl, C<sub>5-12</sub> aryl, and C<sub>4-18</sub> aralkyl, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, or aralkyl moiety may be substituted with one or more radicals selected from the group consisting of C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, halo, C<sub>1-6</sub> haloalkyl, cyano, C<sub>1-8</sub> haloalkoxy, C<sub>2-10</sub> acyl, carboxyl, hydroxy, C<sub>1-6</sub> hydroxyalkoxy, phenoxy, benzyloxy, N,N-di(C<sub>1-8</sub> alkyl)amino(C<sub>1-6</sub> alkoxy), 5- to 12-membered heterocycloalkenyl;

wherein R<sup>10</sup> is selected from the group consisting of hydrido, C<sub>5-12</sub> aryl, 5to 12-membered heteroaryl, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>1-6</sub>
hydroxyalkyl, C<sub>1-8</sub> aminoalkyl, C<sub>2-12</sub> alkylaminoalkyl, C<sub>2-12</sub> alkoxyalkyl, 3- to 12membered heterocycloalkyl, 5- to 12-membered heteroaryl, and 3- to 12membered heterocycloalkenyl;

wherein R<sup>11e</sup> and R<sup>11b</sup> are independently selected from the group consisting of hydrido,  $C_{5-12}$  aryl, 5- to 12-membered heteroaryl,  $C_{1-6}$  alkyl,  $C_{1-6}$  haloalkyl,  $C_{2-6}$  alkenyl,  $C_{2-6}$  alkynyl,  $C_{1-6}$  hydroxyalkyl,  $C_{1-6}$  aminoalkyl,  $C_{2-12}$  alkylaminoalkyl,  $C_{1-6}$  alkoxy,  $C_{2-12}$  alkoxyalkyl, 3- to 12-membered heterocycloalkyl, 5- to 12-membered heteroaryl, and 3- to 12-membered heterocycloalkenyl;

wherein R<sup>2</sup> and R<sup>4</sup> may form a 4- to 6-membered heterocyclic ring having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>6</sup>;

wherein R<sup>7a</sup> and R<sup>7b</sup> may be taken together to form a 3- to 7-membered heterocyclic moiety having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>8a</sup>; and

wherein R<sup>9a</sup> and R<sup>9b</sup> may be taken together to form a 3- to 7-membered heterocyclic moiety having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>8a</sup>;

or a pharmaceutically acceptable salt thereof.

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## 4. A compound according to claim 3 wherein

X is selected from the group consisting of phenyl, biphenyl, naphthyl, and indenyl, wherein X is substituted by R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1d</sup>, and R<sup>1e</sup>;

wherein A is selected from the group consisting of cyclopentyl, cyclohexyl, cycloheptyl, cycloheptyl, cyclohexenyl, cycloheptenyl, phenyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, dihydropyridinyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, and pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, wherein A is optionally substituted by one or more substituents independently selected from the group consisting of R³;

wherein R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1d</sup>, R<sup>1e</sup>, and R<sup>3</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, methyl, ethyl, propyl, butyl, pentyl, hexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methylsulfinyl, ethylsulfinyl, propylsulfinyl, butylsulfinyl, methylsulfonyl, ethylsulfonyl, propylsulfonyl,

butylsulfonyl, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, chloromethoxy, dichloromethoxy, trichloromethoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, phenyl, biphenyl, naphthyl, indenyl, ethenyl, propenyl, butenyl, pentenyl, piperidinyl, pyrrolidinyl,

5 pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, methylcarbonylamino,

ethylcarbonylamino, propylcarbonylamino, butylcarbonylamino, pentylcarbonylamino, hexylcarbonylamino, phenylcarbonylamino, benzylcarbonylamino, -OR¹0, -SR²a, -SO₂N(R²a)R²b, -NRªaCOR²c, -NRªaCO(OR²c), -NRªaSO₂R²a, -NRªaSO₂N(R³a)R³b, -NR³aCON(R³a)R³b, -COR³a, -CO₂R²a, and -CON(R³a)R²b, wherein said phenyl, biphenyl, naphthyl, indenyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl,

isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydroixazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, ethenyl, propenyl, butenyl, or pentenyl may be substituted with one or more substituents selected from the group consisting of R<sup>8a</sup>;

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wherein R⁴ is selected from the group consisting of cyano, -CO₂R⁵⁵, and -CH₂OR⁵⁵, CONR⁵⁰R⁵⁵;

wherein R<sup>58</sup>, R<sup>56</sup>, and R<sup>6</sup> are independently selected from the group

25 consisting of hydrido, hydroxyl, methoxy, ethoxy, propoxy, butoxy, methyl, ethyl,
propyl, butyl, pentyl, hexyl, chloromethyl, dichloromethyl, trichloromethyl,
fluoromethyl, difluoromethyl, trifluoromethyl, phenyl, biphenyl, naphthyl, indenyl,
pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl,
pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, and isoindoledionyl;

wherein R<sup>78</sup> and R<sup>7b</sup> are independently selected from the group consisting of hydrido, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, benzyl, phenylethyl, piperidinyl, pyrrolidinyl, 5 pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, benzylamino, phenylethylamino, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminoethyl, ethylaminoethyl, 10 propylaminoethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, N,N-dimethylaminomethyl, N,N-dimethylaminoethyl, Nmethyl-N-ethylaminomethyl, N-methyl-N-ethylaminoethyl, N-methyl-N-15 propylaminomethyl, N-methyl-N-propylaminoethyl, N,N-diethylaminomethyl, N,Ndiethylaminoethyl, N-ethyl-N-propylaminomethyl, N-ethyl-N-propylaminoethyl, N,N-dipropylaminomethyl, N,N-dipropylaminoethyl, methyl, ethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, pyridinylmethyl, pyridinylethyl, benzothiophenylmethyl, 20 benzothiophenylethyl, indolylmethyl, indolylethyl, isoquinolinylmethyl, isoquinolinylethyl, quinolinylmethyl, quinolinylethyl, thienylmethyl, thienylethyl, pyrrolylmethyl, pyrrolylethyl, furylmethyl, furylethyl, pyrazolylmethyl, pyrazolylethyl, imidazolylmethyl, imidazolylethyl, isoxazolylmethyl, isoxazolylethyl, oxazolylmethyl, oxazolylethyl, isoindoledionylmethyl, and 25 isoindoledionylethyl;

wherein R<sup>8a</sup> and R<sup>8b</sup> are independently selected from the group consisting of hydrido, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl,

pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, benzyl, phenylethyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, cyclopropyl, cyclobutyl, cyclopentyl, 5 cyclohexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, benzylamino, phenylethylamino, amino, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, aminomethylcarbonyl, aminoethylcarbonyl, aminopropylcarbonyl, aminobutylcarbonyl, aminopentylcarbonyl, aminohexylcarbonyl, 10 aminophenylcarbonyl, aminobenzylcarbonyl, pyridinylmethyl, pyridinylethyl, benzothiophenylmethyl, benzothiophenylethyl, indolylmethyl, indolylethyl, isoquinolinylmethyl, isoquinolinylethyl, quinolinylmethyl, quinolinylethyl, thienylmethyl, thienylethyl, pyrrolylmethyl, pyrrolylethyl, furylmethyl, furylethyl, pyrazolylmethyl, pyrazolylethyl, imidazolylmethyl, imidazolylethyl, 15 isoxazolylmethyl, isoxazolylethyl, oxazolylmethyl, oxazolylethyl, isoindoledionylmethyl, and isoindoledionylethyl, wherein said methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, aminomethyl, 20 aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, benzyl, or phenylethyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, methyl, ethyl, propyl, butyl, pentyl, hexyl, methylthio, ethylthio, propylthio, butylthio, methylsulfinyl, 25 ethylsulfinyl, propylsulfinyl, butylsulfinyl, methylsulfonyl, ethylsulfonyl, propylsulfonyl, butylsulfonyl, N-methylamino, N-ethylamino, N-propylamino, methylsulfonamido, ethylsulfonamido, propylsulfonamido, butylsulfonamido, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl,

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methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminoethyl, ethylaminoethyl, propylaminoethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, methoxy, ethoxy, propoxy, butoxy, chloro, fluoro, bromo, iodo, methylcarbonyloxy, ethylcarbonyloxy, propylcarbonyloxy, butylcarbonyloxy, pentylcarbonyloxy, hexylcarbonyloxy, phenylcarbonyloxy, benzylcarbonyloxy, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, chloromethoxy, dichloromethoxy, trichloromethoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, methylcarbonyl, ethylcarbonyl, propylcarbonyl, butylcarbonyl, pentylcarbonyl, hexylcarbonyl, phenylcarbonyl, benzylcarbonyl, hydroxymethoxy, hydroxyethoxy, hydroxypropoxy, hydroxybutoxy, N,Ndimethylaminomethylcarbonyl, N,N-dimethylaminoethylcarbonyl, N,Ndimethylaminophenylcarbonyl, N-methyl-N-ethylaminomethylcarbonyl, N-methyl-N-ethylaminoethylcarbonyl, N-methyl-N-ethylaminophenylcarbonyl, N-methyl-Npropylaminomethylcarbonyl, N-methyl-N-propylaminoethylcarbonyl, N-methyl-Npropylaminophenylcarbonyl, N,N-diethylaminomethylcarbonyl, N,Ndiethylaminoethylcarbonyl, N,N-diethylaminophenylcarbonyl, N-ethyl-Npropylaminomethylcarbonyl, N-ethyl-N-propylaminoethylcarbonyl, N-ethyl-Npropylaminophenylcarbonyl, N,N-dipropylaminomethylcarbonyl, N,Ndipropylaminoethylcarbonyl, N,N-dipropylaminophenylcarbonyl, thiomethyl, thioethyl, thiopropyl, thiobutyl, thiopentyl, thiohexyl, aminomethylcarbonyloxy, aminoethylcarbonyloxy, aminopropylcarbonyloxy, aminobutylcarbonyloxy, aminopentylcarbonyloxy, aminohexylcarbonyloxy, aminophenylcarbonyloxy, aminobenzylcarbonyloxy, methyldioxy, ethyldioxy, propyldioxy, butyldioxy, pentyldioxy, hexyldioxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, N-methylamino, N-ethylamino, Npropylamino, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl,

butoxycarbonyl, methoxymethyl, methoxyethyl, methoxypropyl, ethoxymethyl, ethoxypropyl, propoxymethyl, propoxyethyl, propoxypropyl, butoxymethyl, butoxyethyl, butoxypropyl, ethenylamino, propenylamino, butenylamino, pentenylamino, ethynylamino, propynylamino, butynylamino,

- pentynylamino, ethenyl, propenyl, butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, N,N-dimethylaminomethoxy, N,N-dimethylaminoethoxy, N-methyl-N-ethylaminoethoxy, N-methyl-N-propylaminomethoxy, N-methyl-N-propylaminoethoxy, N,N-diethylaminoethoxy, N-ethyl-N-propylaminomethoxy, N,N-diethylaminoethoxy, N-ethyl-N-propylaminomethoxy,
- N-ethyl-N-propylaminoethoxy, N,N-dipropylaminomethoxy, N,N-dipropylaminoethoxy, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl,
- indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, and isoindoledionyl, wherein said piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl,
- 20 benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, or isoindoledionyl may be substituted with a substituent selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, N-methylamino, N-ethylamino, N-propylamino, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, hydroxymethyl,
- 25 hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl,

methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, and propylaminohexyl;

wherein R<sup>80</sup> is selected from the group consisting of hydrido, nitro, azido, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, 5 pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, benzyl, phenylethyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, chloromethyl, 10 dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, benzylamino, phenylethylamino, amino, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, aminomethylcarbonyl, aminoethylcarbonyl, aminopropylcarbonyl, aminobutylcarbonyl, aminopentylcarbonyl, aminohexylcarbonyl, aminophenylcarbonyl, 15 aminobenzylcarbonyl, pyridinylmethyl, pyridinylethyl, benzothiophenylmethyl, benzothiophenylethyl, indolylmethyl, indolylethyl, isoquinolinylmethyl, isoquinolinylethyl, quinolinylmethyl, quinolinylethyl, thienylmethyl, thienylethyl, pyrrolylmethyl, pyrrolylethyl, furylmethyl, furylethyl, pyrazolylmethyl, pyrazolylethyl, imidazolylmethyl, imidazolylethyl, isoxazolylmethyl, 20 isoxazolylethyl, oxazolylmethyl, oxazolylethyl, isoindoledionylmethyl, and isoindoledionylethyl, wherein said methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, aminomethyl, aminoethyl, aminopropyl, aminobutyl, 25 aminopentyl, aminohexyl, benzyl, or phenylethyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, methyl, ethyl, propyl, butyl, pentyl, hexyl, methylthio, ethylthio,

propylthio, butylthio, methylsulfinyl, ethylsulfinyl, propylsulfinyl, butylsulfinyl, methylsulfonyl, ethylsulfonyl, propylsulfonyl, butylsulfonyl, N-methylamino, Nethylamino, N-propylamino, methylsulfonamido, ethylsulfonamido, propylsulfonamido, butylsulfonamido, aminomethyl, aminoethyl, aminopropyl. aminobutyl, aminopentyl, aminohexyl, methylaminomethyl, ethylaminomethyl, 5 propylaminomethyl, methylaminoethyl, ethylaminoethyl, propylaminoethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, methoxy, ethoxy, propoxy, butoxy, chloro, fluoro, bromo, iodo, 10 methylcarbonyloxy, ethylcarbonyloxy, propylcarbonyloxy, butylcarbonyloxy, pentylcarbonyloxy, hexylcarbonyloxy, phenylcarbonyloxy, benzylcarbonyloxy, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, chloromethoxy, dichloromethoxy, trichloromethoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, methylcarbonyl, ethylcarbonyl, 15 propylcarbonyl, butylcarbonyl, pentylcarbonyl, hexylcarbonyl, phenylcarbonyl, benzylcarbonyl, hydroxymethoxy, hydroxyethoxy, hydroxypropoxy, hydroxybutoxy, N,N-dimethylaminomethylcarbonyl, N,Ndimethylaminoethylcarbonyl, N,N-dimethylaminophenylcarbonyl, N-methyl-Nethylaminomethylcarbonyl, N-methyl-N-ethylaminoethylcarbonyl, N-methyl-N-20 ethylaminophenylcarbonyl, N-methyl-N-propylaminomethylcarbonyl, N-methyl-Npropylaminoethylcarbonyl, N-methyl-N-propylaminophenylcarbonyl, N,Ndiethylaminomethylcarbonyl, N,N-diethylaminoethylcarbonyl, N,Ndiethylaminophenylcarbonyl, N-ethyl-N-propylaminomethylcarbonyl, N-ethyl-Npropylaminoethylcarbonyl, N-ethyl-N-propylaminophenylcarbonyl, N,N-25 dipropylaminomethylcarbonyl, N,N-dipropylaminoethylcarbonyl, N,Ndipropylaminophenylcarbonyl, thiomethyl, thioethyl, thiopropyl, thiobutyl, thiopentyl, thiohexyl, aminomethylcarbonyloxy, aminoethylcarbonyloxy, aminopropylcarbonyloxy, aminobutylcarbonyloxy, aminopentylcarbonyloxy,

aminohexylcarbonyloxy, aminophenylcarbonyloxy, aminobenzylcarbonyloxy, methyldioxy, ethyldioxy, propyldioxy, butyldioxy, pentyldioxy, hexyldioxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, N-methylamino, N-ethylamino, N-propylamino, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, methoxymethyl, methoxypropyl, ethoxymethyl, ethoxymethyl, ethoxypropyl, propoxymethyl, propoxyethyl, propoxypropyl, butoxymethyl, butoxyethyl, butoxypropyl, ethenylamino, propenylamino, butenylamino, pentenylamino, ethynylamino, propynylamino, butynylamino, pentynylamino, ethenyl, propenyl, butoxyl, pentynyl, propenyl, butynyl, pentynyl, N,N-

butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, N,Ndimethylaminomethoxy, N,N-dimethylaminoethoxy, N-methyl-Nethylaminomethoxy, N-methyl-N-ethylaminoethoxy, N-methyl-Npropylaminomethoxy, N-methyl-N-propylaminoethoxy, N,Ndiethylaminomethoxy, N,N-diethylaminoethoxy, N-ethyl-N-propylaminomethoxy,

N-ethyl-N-propylaminoethoxy, N,N-dipropylaminomethoxy, N,N-dipropylaminoethoxy, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, and isoindoledionyl, wherein said piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl,

dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl,

dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, or isoindoledionyl may be substituted with a substituent selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, N-methylamino, N-ethylamino, N-propylamino, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, hydroxymethyl,

isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, and dihydrooxazolyl;

wherein R<sup>2</sup> and R<sup>4</sup> may form a 4- to 6-membered heterocyclic ring having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>6</sup>;

wherein R<sup>7a</sup> and R<sup>7b</sup> may be taken together to form a 3- to 7-membered heterocyclic moiety having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>8a</sup>; and

wherein R<sup>9a</sup> and R<sup>9b</sup> may be taken together to form a 3- to 7-membered heterocyclic moiety having 1 to 3 heteroatoms selected from the group consisting of S, SO, SO<sub>2</sub>, O, N, and NR<sup>8a</sup>;

or a pharmaceutically acceptable salt thereof.

### 5. A compound of Formula III

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wherein R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1d</sup>, and R<sup>3</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, alkyl, haloalkyl, hydroxyalkyl, alkylsulfinyl, alkylsulfonyl, alkoxycarbonyl, haloalkoxy, aryl, alkenyl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, acylamino, -OR<sup>10</sup>, -SR<sup>7</sup>, -SO<sub>2</sub>NHR<sup>7</sup>, -NHR<sup>8a</sup>, -NR<sup>8a</sup>COR<sup>8c</sup>, -NR<sup>8a</sup>CO(OR<sup>8c</sup>), -NR<sup>8a</sup>SO<sub>2</sub>R<sup>9</sup>, -NR<sup>8a</sup>SO<sub>2</sub>NHR<sup>9</sup>, -NR<sup>8a</sup>CONHR<sup>9</sup>, -COR<sup>8a</sup>, -CO<sub>2</sub>R<sup>7</sup>, and -CONHR<sup>7</sup>, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, or alkenyl may be substituted with one or more substituents selected from the group consisting of R<sup>8a</sup>;

propylaminobutyl, methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, methoxymethyl, methoxypropyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, propoxymethyl, propoxypropyl, butoxymethyl, butoxyethyl, butoxypropyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, and dihydrooxazolyl;

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wherein R118 and R116 are independently selected from the group consisting of hydrido, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, methyl, ethyl, propyl, butyl, pentyl, hexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, ethenyl, propenyl, butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminoethyl, ethylaminoethyl, propylaminoethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, methoxy, ethoxy, propoxy, butoxy, methoxymethyl, methoxyethyl, methoxypropyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, propoxymethyl, propoxyethyl, propoxypropyl, butoxymethyl, butoxyethyl, butoxypropyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl,

ethoxy, propoxy, butoxy, chloro, fluoro, bromo, iodo, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, cyano, chloromethoxy, dichloromethoxy, trichloromethoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, methylcarbonyl, ethylcarbonyl, propylcarbonyl, butylcarbonyl, pentylcarbonyl, hexylcarbonyl, phenylcarbonyl, 5 benzylcarbonyl, carboxyl, hydroxy, hydroxymethoxy, hydroxyethoxy, hydroxypropoxy, hydroxybutoxy, phenoxy, benzyloxy, N,Ndimethylaminomethoxy, N,N-dimethylaminoethoxy, N-methyl-Nethylaminomethoxy, N-methyl-N-ethylaminoethoxy, N-methyl-N-10 propylaminomethoxy, N-methyl-N-propylaminoethoxy, N,Ndiethylaminomethoxy, N,N-diethylaminoethoxy, N-ethyl-N-propylaminomethoxy, N-ethyl-N-propylaminoethoxy, N,N-dipropylaminomethoxy, N,Ndipropylaminoethoxy, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, 15 isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, and dihydrooxazolyl;

wherein R<sup>10</sup> is selected from the group consisting of hydrido, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, methyl, ethyl, propyl, butyl, pentyl, hexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, ethenyl, propenyl, butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl,

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hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, propylaminopentyl, methylaminopentyl, methylaminopentyl, methylaminopentyl, methylaminohexyl, ethylaminohexyl, and propylaminohexyl;

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wherein R9 and R9 are independently selected from the group consisting of hydrido, methyl, ethyl, propyl, butyl, pentyl, hexyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, 10 imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, benzylamino, phenylethylamino, pyridinylmethyl, pyridinylethyl, 15 benzothiophenylmethyl, benzothiophenylethyl, indolylmethyl, indolylethyl, isoquinolinylmethyl, isoquinolinylethyl, quinolinylmethyl, quinolinylethyl, thienylmethyl, thienylethyl, pyrrolylmethyl, pyrrolylethyl, furylmethyl, furylethyl, pyrazolylmethyl, pyrazolylethyl, imidazolylmethyl, imidazolylethyl, isoxazolylmethyl, isoxazolylethyl, oxazolylmethyl, oxazolylethyl, 20 isoindoledionylmethyl, isoindoledionylethyl, phenyl, biphenyl, naphthyl, indenyl, benzyl, and phenylethyl, wherein said phenyl, biphenyl, naphthyl, indenyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, 25 dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, benzyl, or phenylethyl may be substituted with one or more radicals selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, methoxy,

wherein R2 is -NHR11;

wherein R<sup>7</sup> is selected from the group consisting of hydrido, aryl, heteroaryl, aralkyl, heterocycloalkyl, heterocycloalkenyl, haloalkyl, aralkylamino, alkylaminoalkyl, N,N-dialkylaminoacyl, alkyl, alkenyl, alkynyl, and heteroaralkyl;

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wherein R<sup>80</sup> is selected from the group consisting of hydrido, alkyl, aryl, heteroaryl, aralkyl, heterocycloalkyl, heterocycloalkenyl, cycloalkyl, haloalkyl, aralkylamino, amino, aminoalkyl, aminoacyl, and heteroaralkyl, wherein said alkyl, aryl, heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, alkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, N-alkylamino, alkylsulfonamido, aminoalkyl, alkylaminoalkyl, alkoxy, halo, acyloxy, haloalkyl, haloalkoxy, acyl, hydroxyalkoxy, dialkylaminoacyl, thioalkyl, aminoacyloxy, alkyldioxy, hydroxyalkyl, N-alkylamino, alkoxycarbonyl, alkoxyalkyl, alkenylamino, alkynyl, nhouselyl, alkynyl, nhouselyl, and heteroaryl, wherein said heterocycloalkyl, heterocycloalkenyl, or heteroaryl substituents may be substituted with a substituent selected from the group consisting of alkyl, N-alkylamino, aminoalkyl, hydroxyalkyl, and alkylaminoalkyl;

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wherein R<sup>8b</sup> is selected from the group consisting of hydrido, nitro, azido, alkyl, aryl, heteroaryl, aralkyl, heterocycloalkyl, heterocycloalkenyl, cycloalkyl, haloalkyl, aralkylamino, amino, aminoalkyl, aminoacyl, and heteroaralkyl, wherein said alkyl, aryl, heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, alkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, N-alkylamino, alkylsulfonamido, aminoalkyl, alkylaminoalkyl, alkoxy, halo, acyloxy, haloalkyl, haloalkoxy, acyl, hydroxyalkoxy, dialkylaminoacyl, thioalkyl, aminoacyloxy, alkyldioxy, hydroxyalkyl, N-alkylamino, alkoxycarbonyl,

alkoxyalkyl, alkenylamino, alkynylamino, alkenyl, alkynyl, N,N-dialkylaminoalkoxy, heterocycloalkyl, heterocycloalkenyl, and heteroaryl, wherein said heterocycloalkyl, heterocycloalkenyl, or heteroaryl substituents may be substituted with a substituent selected from the group consisting of alkyl, N-alkylamino, aminoalkyl, hydroxyalkyl, and alkylaminoalkyl;

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wherein R<sup>9</sup> is selected from the group consisting of hydrido, alkyl, heteroaryl, heterocycloalkyl, heterocycloalkenyl, haloalkyl, aralkylamino, heteroaralkyl, aryl, and aralkyl, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, or aralkyl moieties may be substituted with one or more radicals selected from the group consisting of alkyl, alkoxy, halo, haloalkyl, cyano, haloalkoxy, acyl, carboxyl, hydroxy, hydroxyalkoxy, phenoxy, benzyloxy, N,N-dialkylaminoalkoxy, heteroaryl, heterocycloalkyl, and heterocycloalkenyl; and

wherein R<sup>10</sup> is selected from the group consisting of hydrido, aryl, heteroaryl, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, alkoxyalkyl, heterocycloalkyl, heteroaryl, and heterocycloalkenyl;

wherein R<sup>11</sup> is selected from the group consisting of hydrido, aryl, heteroaryl, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, alkoxy, alkoxyalkyl, heterocycloalkyl, heteroaryl, and heterocycloalkenyl;

or a pharmaceutically acceptable salt thereof.

#### 6. A compound according to claim 5 wherein

R<sup>16</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>16</sup>, and R<sup>3</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, C<sub>1-8</sub> alkyl, C<sub>1-8</sub> haloalkyl, C<sub>1-8</sub> hydroxyalkyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-8</sub> alkylsulfonyl, C<sub>2-7</sub> alkoxycarbonyl, C<sub>1-8</sub> haloalkoxy, C<sub>5-12</sub> aryl, C<sub>2-8</sub> alkenyl, 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl, 5- to 12-membered heteroaryl, C<sub>2-10</sub> acylamino,

-OR<sup>10</sup>, -SR<sup>7</sup>, -SO<sub>2</sub>NHR<sup>7</sup>, -NHR<sup>8a</sup>, -NR<sup>8a</sup>COR<sup>8b</sup>, -NR<sup>8a</sup>CO(OR<sup>8b</sup>), -NR<sup>8a</sup>SO<sub>2</sub>R<sup>9</sup>, -NR<sup>8a</sup>SO<sub>2</sub>NHR<sup>9</sup>, -NR<sup>8a</sup>CONHR<sup>9</sup>, -COR<sup>8a</sup>, -CO<sub>2</sub>R<sup>7</sup>, and -CONHR<sup>7</sup>, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, or alkenyl moiety may be substituted with one or more substituents selected from the group consisting of R<sup>8a</sup>;

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wherein R' is selected from the group consisting of hydrido,  $C_{5-12}$  aryl, 5- to 12-membered heteroaryl,  $C_{4-18}$  aralkyl, 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl,  $C_{1-6}$  haloalkyl,  $C_{4-18}$  aralkylamino,  $C_{2-12}$  alkylaminoalkyl, N-N-di( $C_{1-6}$  alkyl)amino( $C_{1-6}$  alkyl),  $C_{1-6}$  alkyl,  $C_{2-6}$  alkenyl,  $C_{2-6}$  alkynyl, and 4- to 18-membered heteroaralkyl;

wherein R<sup>8a</sup> is selected from the group consisting of hydrido, C<sub>1.5</sub> alkyl, C<sub>5.12</sub> aryl, 5- to 12-membered heteroaryl, C<sub>4.18</sub> aralkyl, 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl,  $C_{3-12}$  cycloalkyl,  $C_{1-6}$ haloalkyl, C4-18 aralkylamino, amino, C1.8 aminoalkyl, C2-10 aminoacyl, and 4- to 18membered heteroaralkyl, wherein said alkyl, aryl, heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, C1.6 alkyl, C1.6 alkylthio, C1.6 alkylsulfinyl,  $C_{1-6}$  alkylsulfonyl, N-( $C_{1-6}$  alkyl)amino,  $C_{1-6}$  alkylsulfonamido,  $C_{1-6}$ aminoalkyl,  $C_{2-12}$  alkylaminoalkyl,  $C_{1-8}$  alkoxy, halo,  $C_{2-10}$  acyloxy,  $C_{1-8}$  haloalkyl,  $C_{1-8}$ haloalkoxy,  $C_{2-10}$  acyl,  $C_{1-6}$  hydroxyalkoxy, N,N-di( $C_{1-6}$  alkyl)amino( $C_{2-10}$  acyl),  $C_{1-6}$ thioalkyl,  $C_{2:10}$  aminoacyloxy,  $C_{1:6}$  alkyldioxy,  $C_{1:6}$  hydroxyalkyl, N-( $C_{1:6}$  alkyl)amino,  $C_{2-7}$  alkoxycarbonyl,  $C_{2-12}$  alkoxyalkyl,  $C_{2-6}$  alkenylamino,  $C_{2-6}$  alkynylamino,  $C_{2-6}$ alkenyl, C<sub>26</sub> alkynyl, N,N-di(C<sub>16</sub> alkyl)amino(C<sub>16</sub> alkoxy), 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl, and 5- to 12-membered heteroaryl, wherein said 3- to 12-membered heterocycloalkyl, 3- to 12membered heterocycloalkenyl, or 5- to 12-membered heteroaryl moiety may be substituted with a substituent selected from the group consisting of C<sub>1-8</sub> alkyl, N-(C, alkyl)amino, C, aminoalkyl, C, hydroxyalkyl, and C2-12 alkylaminoalkyl;

wherein R® is selected from the group consisting of hydrido, nitro, azido,  $C_{1-6}$  alkyl,  $C_{5-12}$  aryl, 5- to 12-membered heteroaryl,  $C_{4-18}$  aralkyl, 3- to 12membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-8</sub> haloalkyl, C<sub>4-18</sub> aralkylamino, amino, C<sub>1-6</sub> aminoalkyl, C<sub>2-10</sub> aminoacyl, and 4- to 18-membered heteroaralkyl, wherein said alkyl, aryl, 5 heteroaryl, aminoalkyl, or aralkyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate,  $C_{1-6}$  alkyl,  $C_{1-6}$  alkylthio,  $C_{1-6}$  alkylsulfinyl,  $C_{1-6}$  alkylsulfonyl, N-( $C_{1-6}$  alkyl)amino,  $C_{1-6}$ alkylsulfonamido,  $C_{1-6}$  aminoalkyl,  $C_{2-12}$  alkylaminoalkyl,  $C_{1-6}$  alkoxy, halo,  $C_{2-10}$ 10 acyloxy, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> haloalkoxy, C<sub>2-10</sub> acyl, C<sub>1-6</sub> hydroxyalkoxy, N,N-di(C<sub>1-6</sub> alkyl)amino(C210 acyl), C16 thioalkyl, C210 aminoacyloxy, C16 alkyldioxy, C16 hydroxyalkyl, N-(C<sub>1.6</sub> alkyl)amino, C<sub>2.7</sub> alkoxycarbonyl, C<sub>2.12</sub> alkoxyalkyl, C<sub>2.6</sub> alkenylamino, C<sub>2-6</sub> alkynylamino, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, N,N-di(C<sub>1-6</sub> alkyl)amino(C<sub>1-6</sub> alkoxy), 3- to 12-membered heterocycloalkyl, 3- to 12-15 membered heterocycloalkenyl, and 5- to 12-membered heteroaryl, wherein said 3- to 12-membered heterocycloalkyl, 3- to 12-membered heterocycloalkenyl, or 5- to 12-membered heteroaryl moiety may be substituted with a substituent selected from the group consisting of C<sub>1-6</sub> alkyl, N-(C<sub>1-6</sub> alkyl)amino, C<sub>1-6</sub> aminoalkyl,  $C_{_{1\text{-}6}}$  hydroxyalkyl, and  $C_{_{2\text{-}12}}$  alkylaminoalkyl; 20

wherein R $^9$  is selected from the group consisting of hydrido, C $_{1-6}$  alkyl, 5-to 12-membered heteroaryl, 3- to 12-membered heterocycloalkenyl, C $_{1-6}$  haloalkyl, C $_{4-18}$  aralkylamino, 4- to 18-membered heteroaralkyl, C $_{5-12}$  aryl, and C $_{4-18}$  aralkyl, wherein said aryl, heterocycloalkyl, heterocycloalkenyl, heteroaryl, or aralkyl moiety may be substituted with one or more radicals selected from the group consisting of C $_{1-6}$  alkyl, C $_{1-6}$  alkoxy, halo, C $_{1-6}$  haloalkyl, cyano, C $_{1-6}$  haloalkoxy, C $_{2-10}$  acyl, carboxyl, hydroxy, C $_{1-6}$  hydroxyalkoxy, phenoxy, benzyloxy, N,N-di(C $_{1-6}$  alkyl)amino(C $_{1-6}$ 

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alkoxy), 5- to 12-membered heteroaryl, 3- to 12-membered heterocycloalkyl, and 3- to 12-membered heterocycloalkenyl;

wherein  $R^{10}$  is selected from the group consisting of hydrido,  $C_{5-12}$  aryl, 5-to 12-membered heteroaryl,  $C_{1-6}$  alkyl,  $C_{1-6}$  haloalkyl,  $C_{2-6}$  alkenyl,  $C_{2-6}$  alkynyl,  $C_{1-6}$  hydroxyalkyl,  $C_{1-6}$  aminoalkyl,  $C_{2-12}$  alkylaminoalkyl,  $C_{2-12}$  alkoxyalkyl, 3- to 12-membered heterocycloalkyl, 5- to 12-membered heterocycloalkenyl;

wherein R<sup>11</sup> is selected from the group consisting of hydrido, C<sub>5-12</sub> aryl, 5-to 12-membered heteroaryl, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>1-6</sub> hydroxyalkyl, C<sub>1-8</sub> aminoalkyl, C<sub>2-12</sub> alkylaminoalkyl, C<sub>1-8</sub> alkoxy, C<sub>2-12</sub> alkoxyalkyl, 3-to 12-membered heterocycloalkyl, 5- to 12-membered heteroaryl, and 3- to 12-membered heterocycloalkenyl;

or a pharmaceutically acceptable salt thereof.

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7. A compound according to claim 6 wherein

R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, R<sup>1d</sup>, and R<sup>3</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, methyl, ethyl, propyl, butyl, pentyl, hexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, hydroxymethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methylsulfinyl, ethylsulfinyl, 20 propylsulfinyl, butylsulfinyl, methylsulfonyl, ethylsulfonyl, propylsulfonyl, butylsulfonyl, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, chloromethoxy, dichloromethoxy, trichloromethoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, phenyl, biphenyl, naphthyl, indenyl, ethenyl, propenyl, butenyl, pentenyl, piperidinyl, pyrrolidinyl, 25 pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl,

pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, methylcarbonylamino, ethylcarbonylamino, propylcarbonylamino, butylcarbonylamino, pentylcarbonylamino, hexylcarbonylamino, phenylcarbonylamino, benzylcarbonylamino, -OR¹o, -SR², -SO₂NHR², -NHR²o, -NR³oCOR³o, -NR³oCO(OR³o), -NR³oSO₂R³o, -NR³oSO₂NHR³o, -NR³oCONHR³o, -COR³o, -CO₂R²o, and -CONHR²o, wherein said phenyl, biphenyl, naphthyl, indenyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, ethenyl, propenyl, butenyl, or pentenyl may be substituted with one or more substituents selected from the group consisting of R³o;

wherein R' is selected from the group consisting of hydrido, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, 15 quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, benzyl, phenylethyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, chloromethyl, 20 dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, benzylamino, phenylethylamino, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminoethyl, ethylaminoethyl, propylaminoethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, ethylaminopentyl, 25 propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, N,Ndimethylaminomethyl, N,N-dimethylaminoethyl, N-methyl-N-ethylaminomethyl, N-methyl-N-ethylaminoethyl, N-methyl-N-propylaminomethyl, N-methyl-Npropylaminoethyl, N,N-diethylaminomethyl, N,N-diethylaminoethyl, N-ethyl-N-

propylaminomethyl, N-ethyl-N-propylaminoethyl, N,N-dipropylaminomethyl, N,N-dipropylaminomethyl, N,N-dipropylaminomethyl, N,N-dipropylaminomethyl, N,N-dipropylaminomethyl, nethyl, propyl, butyl, pentyl, hexyl, ethenyl, propenyl, butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, pyridinylmethyl, pyridinylmethyl, pyridinylmethyl, indolylmethyl, indolylmethyl, indolylmethyl, indolylmethyl, indolylmethyl, indolylmethyl, indolylmethyl, quinolinylmethyl, quinolinylmethyl, quinolinylmethyl, pyrrolylmethyl, pyrrolylmethyl, pyrrolylmethyl, furylmethyl, furylethyl, pyrazolylmethyl, pyrazolylmethyl, imidazolylmethyl, imidazolylmethyl, isoxazolylmethyl, isoxazolylmethyl, oxazolylmethyl, isoindoledionylmethyl, and isoindoledionylethyl;

wherein R® is selected from the group consisting of hydrido, methyl, ethyl, 10 propyl, butyl, pentyl, hexyl, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, benzyl, phenylethyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, 15 dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, benzylamino, phenylethylamino, amino, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, aminomethylcarbonyl, 20 aminoethylcarbonyl, aminopropylcarbonyl, aminobutylcarbonyl, aminopentylcarbonyl, aminohexylcarbonyl, aminophenylcarbonyl, aminobenzylcarbonyl, pyridinylmethyl, pyridinylethyl, benzothiophenylmethyl, benzothiophenylethyl, indolylmethyl, indolylethyl, isoquinolinylmethyl, isoquinolinylethyl, quinolinylmethyl, quinolinylethyl, thienylmethyl, thienylethyl, 25 pyrrolylmethyl, pyrrolylethyl, furylmethyl, furylethyl, pyrazolylmethyl, pyrazolylethyl, imidazolylmethyl, imidazolylethyl, isoxazolylmethyl, isoxazolylethyl, oxazolylmethyl, oxazolylethyl, isoindoledionylmethyl, and isoindoledionylethyl, wherein said methyl, ethyl, propyl, butyl, pentyl, hexyl,

phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, benzyl, or phenylethyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, 5 carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate, isothiocyanate, methyl, ethyl, propyl, butyl, pentyl, hexyl, methylthio, ethylthio, propylthio, butylthio, methylsulfinyl, ethylsulfinyl, propylsulfinyl, butylsulfinyl, methylsulfonyl, ethylsulfonyl, propylsulfonyl, butylsulfonyl, N-methylamino, Nethylamino, N-propylamino, methylsulfonamido, ethylsulfonamido, 10 propylsulfonamido, butylsulfonamido, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminoethyl, ethylaminoethyl, propylaminoethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, ethylaminopentyl, 15 propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, methoxy, ethoxy, propoxy, butoxy, chloro, fluoro, bromo, iodo, methylcarbonyloxy, ethylcarbonyloxy, propylcarbonyloxy, butylcarbonyloxy, pentylcarbonyloxy, hexylcarbonyloxy, phenylcarbonyloxy, benzylcarbonyloxy, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, 20 trifluoromethyl, chloromethoxy, dichloromethoxy, trichloromethoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, methylcarbonyl, ethylcarbonyl, propylcarbonyl, butylcarbonyl, pentylcarbonyl, hexylcarbonyl, phenylcarbonyl, benzylcarbonyl, hydroxymethoxy, hydroxyethoxy, hydroxypropoxy, hydroxybutoxy, N,N-dimethylaminomethylcarbonyl, N,N-25 dimethylaminoethylcarbonyl, N,N-dimethylaminophenylcarbonyl, N-methyl-Nethylaminomethylcarbonyl, N-methyl-N-ethylaminoethylcarbonyl, N-methyl-Nethylaminophenylcarbonyl, N-methyl-N-propylaminomethylcarbonyl, N-methyl-Npropylaminoethylcarbonyl, N-methyl-N-propylaminophenylcarbonyl, N,N-

diethylaminomethylcarbonyl, N,N-diethylaminoethylcarbonyl, N,Ndiethylaminophenylcarbonyl, N-ethyl-N-propylaminomethylcarbonyl, N-ethyl-Npropylaminoethylcarbonyl, N-ethyl-N-propylaminophenylcarbonyl, N,Ndipropylaminomethylcarbonyl, N,N-dipropylaminoethylcarbonyl, N,Ndipropylaminophenylcarbonyl, thiomethyl, thioethyl, thiopropyl, thiobutyl, 5 thiopentyl, thiohexyl, aminomethylcarbonyloxy, aminoethylcarbonyloxy, aminopropylcarbonyloxy, aminobutylcarbonyloxy, aminopentylcarbonyloxy, aminohexylcarbonyloxy, aminophenylcarbonyloxy, aminobenzylcarbonyloxy, methyldioxy, ethyldioxy, propyldioxy, butyldioxy, pentyldioxy, hexyldioxy, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, 10 hydroxyhexyl, N-methylamino, N-ethylamino, N-propylamino, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, methoxymethyl, methoxyethyl, methoxypropyl, ethoxymethyl, ethoxypropyl, propoxymethyl, propoxyethyl, propoxypropyl, butoxymethyl, butoxyethyl, butoxypropyl, ethenylamino, propenylamino, butenylamino, pentenylamino, 15 ethynylamino, propynylamino, butynylamino, pentynylamino, ethenyl, propenyl, butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, N,Ndimethylaminomethoxy, N,N-dimethylaminoethoxy, N-methyl-Nethylaminomethoxy, N-methyl-N-ethylaminoethoxy, N-methyl-Npropylaminomethoxy, N-methyl-N-propylaminoethoxy, N,N-20 diethylaminomethoxy, N,N-diethylaminoethoxy, N-ethyl-N-propylaminomethoxy, N-ethyl-N-propylaminoethoxy, N,N-dipropylaminomethoxy, N,Ndipropylaminoethoxy, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, 25 dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, and isoindoledionyl, wherein said piperidinyl, pyrrolidinyl,

pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl,

dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, or isoindoledionyl may be substituted with a substituent selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, N-methylamino, N-ethylamino, N-propylamino, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, hydroxymethyl, hydroxypethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminobutyl, methylaminobutyl, methylaminobutyl, ethylaminopentyl, methylaminobexyl, ethylaminopentyl, methylaminopentyl, methylaminobexyl, ethylaminopentyl, methylaminohexyl, methylaminohexyl, ethylaminobexyl, methylaminohexyl, and propylaminohexyl;

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wherein R<sup>8b</sup> is selected from the group consisting of hydrido, nitro, azido, methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, biphenyl, naphthyl, indenyl, 15 pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, benzyl, phenylethyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, 20 dihydrooxazolyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, benzylamino, phenylethylamino, amino, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, aminomethylcarbonyl, aminoethylcarbonyl, aminopropylcarbonyl, aminobutylcarbonyl, 25 aminopentylcarbonyl, aminohexylcarbonyl, aminophenylcarbonyl, aminobenzylcarbonyl, pyridinylmethyl, pyridinylethyl, benzothiophenylmethyl, benzothiophenylethyl, indolylmethyl, indolylethyl, isoquinolinylmethyl, isoquinolinylethyl, quinolinylmethyl, quinolinylethyl, thienylmethyl, thienylethyl,

pyrrolylmethyl, pyrrolylethyl, furylmethyl, furylethyl, pyrazolylmethyl. pyrazolylethyl, imidazolylmethyl, imidazolylethyl, isoxazolylmethyl, isoxazolylethyl, oxazolylmethyl, oxazolylethyl, isoindoledionylmethyl, and isoindoledionylethyl, wherein said methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, 5 isoguinolinyl, guinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, benzyl, or phenylethyl may be substituted with one or more substituents selected from the group consisting of oxy, formyl, cyano, carboxyl, hydroxy, sulfamyl, phenoxy, nitro, azido, benzyloxy, thiocyanate. 10 isothiocyanate, methyl, ethyl, propyl, butyl, pentyl, hexyl, methylthio, ethylthio, propylthio, butylthio, methylsulfinyl, ethylsulfinyl, propylsulfinyl, butylsulfinyl, methylsulfonyl, ethylsulfonyl, propylsulfonyl, butylsulfonyl, N-methylamino, Nethylamino, N-propylamino, methylsulfonamido, ethylsulfonamido, propylsulfonamido, butylsulfonamido, aminomethyl, aminoethyl, aminopropyl, 15 aminobutyl, aminopentyl, aminohexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminoethyl, ethylaminoethyl, propylaminoethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, 20 methoxy, ethoxy, propoxy, butoxy, chloro, fluoro, bromo, iodo, methylcarbonyloxy, ethylcarbonyloxy, propylcarbonyloxy, butylcarbonyloxy, pentylcarbonyloxy, hexylcarbonyloxy, phenylcarbonyloxy, benzylcarbonyloxy, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, chloromethoxy, dichloromethoxy, trichloromethoxy, 25 fluoromethoxy, difluoromethoxy, trifluoromethoxy, methylcarbonyl, ethylcarbonyl, propylcarbonyl, butylcarbonyl, pentylcarbonyl, hexylcarbonyl, phenylcarbonyl, benzylcarbonyl, hydroxymethoxy, hydroxyethoxy, hydroxypropoxy, hydroxybutoxy, N,N-dimethylaminomethylcarbonyl, N,N-

dimethylaminoethylcarbonyl, N,N-dimethylaminophenylcarbonyl, N-methyl-N-ethylaminomethylcarbonyl, N-methyl-N-ethylaminoethylcarbonyl, N-methyl-N-propylaminomethylcarbonyl, N-methyl-N-propylaminophenylcarbonyl, N-methyl-N-propylaminophenylcarbonyl, N,N-diethylaminoethylcarbonyl, N,N-diethylaminoethylcarbonyl, N,N-diethylaminomethylcarbonyl, N-ethyl-N-propylaminomethylcarbonyl, N-ethyl-N-propylaminophenylcarbonyl, N,N-dipropylaminophenylcarbonyl, N,N-dipropylaminoethylcarbonyl, N,N-dipropylaminoethylcarbony

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- dipropylaminophenylcarbonyl, thiomethyl, thioethyl, thiopropyl, thiobutyl,
  thiopentyl, thiohexyl, aminomethylcarbonyloxy, aminoethylcarbonyloxy,
  aminopropylcarbonyloxy, aminobutylcarbonyloxy, aminopentylcarbonyloxy,
  aminohexylcarbonyloxy, aminophenylcarbonyloxy, aminobenzylcarbonyloxy,
  methyldioxy, ethyldioxy, propyldioxy, butyldioxy, pentyldioxy, hexyldioxy,
  hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl,
- hydroxyhexyl, N-methylamino, N-ethylamino, N-propylamino, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, butoxycarbonyl, methoxymethyl, methoxypropyl, ethoxymethyl, ethoxypropyl, propoxymethyl, propoxyethyl, propoxypropyl, butoxymethyl, butoxyethyl, butoxypropyl, ethenylamino, propenylamino, butenylamino, pentenylamino,
- ethynylamino, propynylamino, butynylamino, pentynylamino, ethenyl, propenyl, butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, N,N-dimethylaminomethoxy, N,N-dimethylaminoethoxy, N-methyl-N-ethylaminoethoxy, N-methyl-N-propylaminomethoxy, N-methyl-N-propylaminoethoxy, N,N-
- diethylaminomethoxy, N,N-diethylaminoethoxy, N-ethyl-N-propylaminomethoxy, N-ethyl-N-propylaminoethoxy, N,N-dipropylaminomethoxy, N-ethyl-N-propylaminomethoxy, N-ethyl-N-propylaminomethoxy, N-ethyl-N-propylaminomethoxy, N-ethyl-N-propylaminomethoxy, N-ethyl-N-propylaminomethoxy, N,N-dipropylaminomethoxy, N,N-dipropylaminomethoxy

dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, and isoindoledionyl, wherein said piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, 5 dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, or isoindoledionyl may be substituted with a substituent selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, N-methylamino, N-ethylamino, N-propylamino, aminomethyl, 10 aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminoethyl, ethylaminoethyl, propylaminoethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, 15 methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, and propylaminohexyl;

wherein R<sup>9</sup> is selected from the group consisting of hydrido, methyl, ethyl, propyl, butyl, pentyl, hexyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroindazolyl, dihydroisoxazolyl, dihydrooxazolyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, benzylamino, pyridinylmethyl, pyridinylethyl, benzothiophenylmethyl, benzothiophenylethyl, indolylmethyl, indolylethyl, isoquinolinylmethyl, isoquinolinylethyl, quinolinylmethyl, quinolinylmethyl, furylmethyl, furylethyl, thienylmethyl, thienylethyl, pyrrolylmethyl, pyrrolylethyl, furylmethyl, furylethyl,

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pyrazolylmethyl, pyrazolylethyl, imidazolylmethyl, imidazolylethyl, isoxazolylmethyl, isoxazolylethyl, oxazolylmethyl, oxazolylethyl, isoindoledionylmethyl, isoindoledionylethyl, phenyl, biphenyl, naphthyl, indenyl, benzyl, and phenylethyl, wherein said phenyl, biphenyl, naphthyl, indenyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, 5 isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, dihydrooxazolyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, benzyl, or phenylethyl may be substituted with one or more radicals selected 10 from the group consisting of methyl, ethyl, propyl, butyl, pentyl, hexyl, methoxy, ethoxy, propoxy, butoxy, chloro, fluoro, bromo, iodo, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, cyano, chloromethoxy, dichloromethoxy, trichloromethoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, methylcarbonyl, ethylcarbonyl, 15 propylcarbonyl, butylcarbonyl, pentylcarbonyl, hexylcarbonyl, phenylcarbonyl, benzylcarbonyl, carboxyl, hydroxy, hydroxymethoxy, hydroxyethoxy, hydroxypropoxy, hydroxybutoxy, phenoxy, benzyloxy, N,Ndimethylaminomethoxy, N,N-dimethylaminoethoxy, N-methyl-Nethylaminomethoxy, N-methyl-N-ethylaminoethoxy, N-methyl-N-20 propylaminomethoxy, N-methyl-N-propylaminoethoxy, N,Ndiethylaminomethoxy, N,N-diethylaminoethoxy, N-ethyl-N-propylaminomethoxy, N-ethyl-N-propylaminoethoxy, N,N-dipropylaminomethoxy, N,Ndipropylaminoethoxy, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, 25 piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, and dihydrooxazolyl;

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wherein R<sup>10</sup> is selected from the group consisting of hydrido, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, methyl, ethyl, propyl, butyl, pentyl, hexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, ethenyl, propenyl, butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminoethyl, ethylaminoethyl, propylaminoethyl, methylaminopropyl, ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, methoxymethyl, methoxyethyl, methoxypropyl, ethoxymethyl, ethoxypropyl, propoxymethyl, propoxyethyl, propoxypropyl, butoxymethyl, butoxyethyl, butoxypropyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, and dihydrooxazolyl;

wherein R<sup>11</sup> is selected from the group consisting of hydrido, phenyl, biphenyl, naphthyl, indenyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, methyl, ethyl, propyl, butyl, pentyl, hexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, ethenyl, propenyl, butenyl, pentenyl, ethynyl, propynyl, butynyl, pentynyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, aminomethyl, aminoethyl, aminopropyl, aminobutyl, aminopentyl,

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aminohexyl, methylaminomethyl, ethylaminomethyl, propylaminomethyl, methylaminoethyl, ethylaminoethyl, propylaminoethyl, methylaminopropyl. ethylaminopropyl, propylaminopropyl, methylaminobutyl, ethylaminobutyl, propylaminobutyl, methylaminopentyl, ethylaminopentyl, propylaminopentyl, methylaminohexyl, ethylaminohexyl, propylaminohexyl, methoxy, ethoxy, propoxy, butoxy, methoxymethyl, methoxyethyl, methoxypropyl, ethoxymethyl, ethoxyethyl, ethoxypropyl, propoxymethyl, propoxyethyl, propoxypropyl, butoxymethyl, butoxyethyl, butoxypropyl, piperidinyl, pyrrolidinyl, pyrazolidinyl, imidazolidinyl, isoxazolidinyl, oxazolidinyl, pyridinyl, benzothiophenyl, indolyl, isoquinolinyl, quinolinyl, thienyl, pyrrolyl, furyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, isoindoledionyl, isoindolyl, dihydroindolyl, isoindoline, dihydrothiophenyl, dihydropyrrolyl, dihydrofuryl, dihydropyrazolyl, dihydroimidazolyl, dihydroisoxazolyl, and dihydrooxazolyl;

or a pharmaceutically acceptable salt thereof.

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#### 8. A compound of Formula IV

wherein R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup>, and R<sup>1d</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, alkyl, haloalkyl, hydroxyalkyl, haloalkoxy, -OR<sup>10</sup>, -NHR<sup>0</sup>, -NHCOR<sup>0</sup>, -NHCO(OR<sup>0</sup>), -NHCONHR<sup>0</sup>, -COR<sup>0</sup>, -CO<sub>2</sub>R<sup>7</sup>, and -CONHR<sup>7</sup>; and

wherein R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, and R<sup>10</sup> are independently selected from the group consisting of hydrido, haloalkyl, alkyl, cycloalkyl, cycloalkylalkyl, and alkenyl; or a pharmaceutically acceptable salt thereof.

# 9. A compound according to claim 8 wherein

R<sup>16</sup>, R<sup>16</sup>, R<sup>16</sup>, and R<sup>16</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> hydroxyalkyl, C<sub>1-6</sub> haloalkoxy, -OR<sup>10</sup>, -NHCOR<sup>6</sup>, -NHCO(OR<sup>6</sup>), -NHCONHR<sup>9</sup>, -COR<sup>6</sup>, -CO<sub>2</sub>R<sup>7</sup>, and -CONHR<sup>7</sup>; and

wherein  $R^7$ ,  $R^8$ ,  $R^9$ , and  $R^{10}$  are independently selected from the group consisting of hydrido,  $C_{1-6}$  haloalkyl,  $C_{1-6}$  alkyl,  $C_{3-12}$  cycloalkyl,  $C_{4-18}$  cycloalkylalkyl, and  $C_{2-6}$  alkenyl;

or a pharmaceutically acceptable salt thereof.

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# A compound according to claim 9 wherein

R<sup>18</sup>, R<sup>16</sup>, R<sup>16</sup>, and R<sup>1d</sup> are independently selected from the group consisting of hydrido, cyano, hydroxyl, nitro, halo, methyl, ethyl, propyl, butyl, pentyl, hexyl, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, hydroxyhexyl, chloromethoxy, dichloromethoxy, trichloromethoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, -OR<sup>10</sup>, -NHR<sup>8</sup>, -NHCOR<sup>8</sup>, -NHCO(OR<sup>8</sup>), -NHCONHR<sup>9</sup>, -COR<sup>8</sup>, -CO<sub>2</sub>R<sup>7</sup>, and -CONHR<sup>7</sup>; and

wherein R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, and R<sup>10</sup> are independently selected from the group consisting of hydrido, chloromethyl, dichloromethyl, trichloromethyl, fluoromethyl, difluoromethyl, trifluoromethyl, methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopropylmethyl, cyclopropylethyl, cyclobutylmethyl, cyclobutylethyl, cyclopentylmethyl, cyclopentylethyl, cyclohexylmethyl, and ethenyl, propenyl, butenyl, and pentenyl;

or a pharmaceutically acceptable salt thereof.

11. A compound according to claim 1 selected from the group consisting of:

4-amino-2-(2,6-dihydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;

4-amino-2-(5-chloro-2-hydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;

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4-amino-2-(2-hydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;

4-amino-2-(3,5-dichloro-2,6-dihydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-10 carbonitrile hydrochloride;

4-amino-2-(2-hydroxy-6-methoxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;

4-amino-2-(2,5-dihydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;

4-amino-2-(2-fluoro-6-hydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;

4-amino-2-[2-hydroxy-5-(trifluoromethyl)phenyl]-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;

4-amino-2-[2-hydroxy-4-(trifluoromethyl)phenyl]-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;

4-amino-2-(2-hydroxy-6-propylphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile;

4-amino-2-(2-hydroxy-6-isobutylphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile;

4-amino-2-[2-hydroxy-6-(3-methylbutyl)phenyl]-6-piperidin-3-ylpyrimidine-5-carbonitrile;

4-amino-2-(5-bromo-2-hydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile; and

4-amino-2-(5-chloro-2-hydroxyphenyl)-6-(piperidin-3-yl)pyrimidine-5-carbonitrile;

and pharmaceutically-acceptable salts thereof.

- 5 12. A compound according to claim 11 selected from the group consisting of:
  - 4-amino-2-(2,6-dihydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;
- 4-amino-2-(5-chloro-2-hydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-10 carbonitrile hydrochloride;
  - 4-amino-2-(2-hydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;
  - 4-amino-2-(3,5-dichloro-2,6-dihydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;
- 4-amino-2-(2-hydroxy-6-methoxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;
  - 4-amino-2-(2,5-dihydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;
  - 4-amino-2-(2-fluoro-6-hydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;

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- 4-amino-2-[2-hydroxy-5-(trifluoromethyl)phenyl]-6-piperidin-3-ylpyrimidine-5-carbonitrile hydrochloride;
- 4-amino-2-(2-hydroxy-6-propylphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile;
- 4-amino-2-[2-hydroxy-6-(3-methylbutyl)phenyl]-6-piperidin-3-ylpyrimidine-5-carbonitrile;
  - 4-amino-2-(5-bromo-2-hydroxyphenyl)-6-piperidin-3-ylpyrimidine-5-carbonitrile; and

4-amino-2-(5-chloro-2-hydroxyphenyl)-6-(piperidin-3-yl)pyrimidine-5-carbonitrile;

and pharmaceutically-acceptable salts thereof.

13. A pharmaceutical composition comprising a compound according to any one of claims 1-12 or a pharmaceutically-acceptable salt thereof, and a pharmaceutically acceptable carrier, diluent, or adjuvant.

14. Use of a compound according to any one of claims 1-12 for the
 10 preparation of a medicament for the treatment of cancer, inflammation, or an inflammation-associated disorder in a subject.

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15. A use according to claim 14 wherein said medicament is for the treatment of arthritis, cancer, asthma, COPD, frailty, diabetes, atherosclerosis, pain, and/or dermatological disease.